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Western Reserve University

MEDICAL COLLEGE CATALOGUE.

1901-1902.

[WITH ANNOUNCEMENTS FOR 1902–1903.]

CLEVELAND, OHIO.

Issued Bi-Monthly by
WESTERN RESERVE UNIVERSITY,
2430 Euclid Ave.

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NOTICE.

The Medical Course in this school comprises four years of eight months each.

This school stands fourth in the amount of endowment among the Medical Schools of this country.

The teachers in the departments of Anatomy, Chemistry, Physiology, Histology, Comparative Anatomy and Embryology, Bacteriology, Pharmacology, Pathology and Clinical Microscopy, devote their entire time to teaching and original research work.

The requirements for admission to the first year of the school are the completion of the Junior year in a recognized literary college.

Graduates of good literary colleges, who have completed an amount of work equal to that of the first year of the Medical Course, will be admitted to second year standing in the Medical School.

The clinical opportunities comprise all the material of Lakeside and Charity Hospitals, the Maternity, Children's Home, and Dispensary at Charity Hospital, and the Dispensary of the Western Reserve University and Lakeside Hospital, throughout the year, and the City Hospital to January 1st.

Of a class of twenty-five men graduating in 1901, twenty received hospital appointments.

A new laboratory has been built and equipped at a cost of $15,000, and the Chair endowed, for Clinical Microscopy and Clinical Medicine and Surgery, in which students are given practical instruction in the examination of all secretions, blood, tumors, stomach contents, etc.

The expenses in this school, as compared with certain other schools, are such that a student may save, on a four years' course, nearly enough to give him a year's training abroad.

Western Reserve Univ. 8

FIFTY-NINTH ANNUAL CATALOGUE

OF THE

MEDICAL COLLEGE

OF

WESTERN RESERVE UNIVERSITY,

CLEVELAND, OHIO,

1902 - 1903.

CALENDAR.

1902.	
January 7th	Exercises resumed.
May 20th	Final examinations begin.
June 11th	Alumni meeting.
June 12th	Commencement.
September 29th and 30th	Examinations for admission.
October 1st	Session opens.
December 20th	Holiday recess begins.
1903.	
January 6th	Exercises resumed.
May 19th	Final examinations begin.
June 23d	Commencement.

TRUSTEES.

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CHARLES F. BRUSH, PH. D., LL. D. Cleveland
HARRY A. HARING, A. B., *Acting Treasurer*, Office in Adelbert College Building

*Deceased.

THE MEDICAL COLLEGE.

GENERAL STATEMENT.

THE Medical Department of the Western Reserve University was organized, in 1843, as the Cleveland Medical College, a branch of the Western Reserve College. The first Faculty contained the names of Drs. John Delemater, Jared P. Kirtland, Noah Worcester, Horace A. Ackley, John Lang Cassels, and Samuel St. John, names widely known in medicine. The first class graduated in 1844. The requirements for graduation were three years study of medicine, including two required terms of attendance on medical lectures, each term extending over a period of sixteen weeks, together "with good moral character." The old college was built in 1844, on the site of the present college building, corner of St. Clair and Erie Streets. This ground has since been continuously occupied for medical college purposes. The length of the course remained sixteen weeks until 1868, when it was increased to seventeen weeks. In 1871 the course was increased to twenty weeks. In 1875 the old Cleveland City Hospital, with its fifty-nine beds, the predecessor of the Lakeside Hospital, was first utilized for clinical purposes. In 1878 the length of the course became twenty-four weeks. In 1881 an optional three years course was adopted. In 1881 Charity Hospital was added as a clinical field, with about seventy-five beds, together with its Maternity Department. In 1887 the present commodious college building was first occupied; in the same year a preliminary examination was for the first time instituted. In 1888 the length of the course was increased to six months, and the number of the courses required to three. In the same year laboratory work was made an obligatory part of the course, in Chemistry and Pathology. An optional four years course was adopted in 1895, and was made obligatory in the following year. In 1895 the length of the course was increased to eight months; at the same time practical work in the laboratories of Histology, Bacteriology and Physiology, was added as a part of the required college work. In 1896 also, the right to use the present City Hospital for four months in the year

for clinical purposes was acquired. In January, 1898, the new Lakeside Hospital was formally occupied, and the new chemical laboratory was erected. At the same time laboratory instruction in Pharmacology was added as one of the required courses of the curriculum. In 1900 the new laboratory of Clinical Microscopy and Clinical Medicine was erected and in 1901 it was fully equipped. In 1901, by unanimous recommendation of the Medical Faculty and by vote of the Trustees, the requirements for admission to the first year of the Medical College were increased to include the work of the Junior year in a recognized literary college. The rapid development of the curriculum in this school in these late years has only been possible through the generous financial assistance of its many friends, to whom the Medical Faculty thus desires to make public acknowledgment. The graduates of the Medical College now number two thousand, two hundred and twenty-two.

The course of study for the degree of Doctor of Medicine is now of four years duration. The school year or session begins on the first of October, unless this falls on Sunday in which case it begins on the second, and continues eight months. Theoretical and applied branches of study are graded, and arranged with reference to their bearing upon and preparation for each other, and the effect of the whole course. Instruction is given by lectures, recitations, quizzes, laboratory work, clinical demonstrations, clinical conferences and practical dispensary and bedside work. Endowment of the chairs of Anatomy, Histology, Bacteriology, Physiology, Chemistry, Pathology, Pharmacology, and Clinical Microscopy, permits the employment of teachers who devote all of their time to teaching and research in this college. The buildings are modern in plan, construction and equipment, and ample in size for their purposes. In the subjects of Anatomy, Chemistry, Physiology, Histology, Embryology and Comparative Anatomy, Bacteriology, Pathological Anatomy, Pharmacy and Pharmacology, and Clinical Microscopy, laboratory work accompanies the didactic instruction and is required of every student. In the Senior class every student is required to do practical work in the Dispensaries, at the bedside in the hospitals, and in the obstetrical wards.

FACULTY.

CHARLES FRANKLIN THWING, D. D., LL. D., 55 Bellflower Av.
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Professor of Medicine and Clinical Medicine.

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The Leonard Hanna Lecturer on Clinical Microscopy.

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WM. J. W. WOOLGAR, M. D.,
Assistant in Obstetrics at Lakeside Hospital Dispensary.

ROY B. METZ, M. D., Medical College.
Clerk of Medical College.

ANDREW FLOWER, Erie and St. Clair Sts.
Prosector and Curator Anatomical Rooms.

MRS. FLOWER, Erie and St. Clair Sts.
Janitress.

GRADUATES.

WILLIAM S. BALDWIN, - Cleveland.
ARTHUR H. BILL, A. M., Cleveland.
ARTHUR E. BROWN, - Greenville, Pa.
PAUL P. CARLISLE, - Mt. Gilead.
PAUL H. COWLEY, A. B., - Lorain.
JOHN DICKENSON, JR., - Cleveland.
SIMON ENGLANDER, - Cleveland.
A. H. GILL, - - - Cleveland.
EDWARD GROSSMAN, - Cleveland.
CHARLES H. HAY, - - - Seville.
CHARLES S. HOOVER, - - Alliance.
EDGAR M. ICKES, B. L., - Fremont.
A. IRVING LUDLOW, A. B., Cleveland.
JAMES T. MCCONNELL, - Strongsville.
A. W. MERCER, M. D., - Cleveland.
ROY B. METZ, - - Cleveland.
JOHN NEUBERGER, - - Cleveland.
DAVID W. PEPPARD, - - Crestline.
WILLIAM H. RICHARDSON, Lisbon.
ROY L. STACKPOLE, - Venango, Pa.
ARTHUR H. STALL, - Cleveland.
CLARENCE B. WEAN, - - Kinsman.
CHARLES J. WEHR, A. B., Cleveland.
ERNEST L. WRENTMORE, - Cleveland.
LOGAN B. ZINTSMASTER, - Navarre.

STUDENTS, 1901-1902.

FOURTH YEAR.

Jacob B. Austin, Ph. B.,	*Cleveland*	217 Oakdale St.
John W. Boss, A. B.,	*Cleveland*	530 Euclid Av.
E. D. Brown,	*Cleveland*	1617 Cedar Av.
Brady B. Buck,	*Carrollton*	701 Superior St
Mars W. Carpenter,	*Temple*	451 Pearl St.
Percy W. Cobb, B. S.,	*Cleveland*	37 Hazard St
Chris E. Corlett,	*Cleveland*	264 Sawtell Av.
Herbert E. Edwards,	*Cleveland*	161 Putnam St.
C. V. Garver,	*Wooster*	442 Euclid Av.
Arthur Leroy Garrison,	*Rochester*	275 Prospect St.
Walter A. Haldy,	*Cleveland*	502 Euclid Av.
Walter E. Hatch,	*Cleveland*	141 Chestnut St.
James J. Hathaway,	*Cleveland*	1378 Superior St.
George R. Hays,	*Massillon*	57 Sibley St.
Jesse E. Hunt,	*Cleveland*	726 E. Prospect St.
Frank H. Ikirt,	*Liverpool*	
J. B. Isham,	*Cleveland*	828 Rose Bldg.
Foster W. Jackson,	*Warren*	37 Hazard St.
Nathaniel M. Jones, Jr., B. L.,	*Cleveland*	162 Taylor St.
Emanuel Klaus,	*Cleveland*	958 Lorain St.
Max H. Klaus,	*Cleveland*	958 Lorain St.
Claude W. Lane,	*Kenilworth*	Erie & St. Clair Sts.
John F. Lindsay,	*Salineville*	32 Hazard St.
William J. Manning,	*Cleveland*	1 Dodge Ct.
John Mohr,	*Cleveland*	6 Cleve St.
William C. Park,	*Grafton*	141 Chestnut St.
Ben Peskind, B. S.,	*Cleveland*	1354 Willson Av.
John R. Philen,	*Cleveland*	232 Champlain St.
Carlos E. Pitkin,	*Brunswick*	32 Hazard St.
Henry Riewel,	*Cleveland*	95 Perry St.
Clarence D. Selby,	*Portsmouth*	64 Hawthorne Av.
C. H. Senn, M. D.,	*Williamsport, Pa.*	755 Superior St.
George W. Shepard,	*Mantua Station*	530 Euclid Av.
James A. Sherbondy,	*Jamestown, Pa.*	701 Superior St.
W. F. Stahl,	*Cleveland*	171 Dodge St.
Parker F. Southwick,	*Kendallville, Ind.*	141 Chestnut St.
Alvin S. Storey, B. S.,	*Cleveland*	1083 St. Clair St.
B. C. Tarnutzer,	*Portage, Wis.*	914 Franklin Av.
Thomas J. Taylor,	*Cleveland*	294 Sterling Av

John H. Weber, Ph. B.,	*Miamisburg*	442 Euclid Av.
B. W. Wilson, A. B.,	*Cleveland*	530 Euclid Av.
David Yohannon, A. B.,	*Persia*	1083 St. Clair St.

FOURTH YEAR, 42.

THIRD YEAR.

George I. Bauman,	*Cleveland*	1279 Cedar Av.
Arno E. Bohm.	*Cleveland*	311 Huntington St.
John J. L. Bolden,	*Cleveland*	25 Newton St.
Nathan W. Brown, B. S.,	*Swatow, China*	331 Kennard St
Webb P. Chamberlain, A. B.,	*Twinsburg*	6 Wycombe Pl.
Carl Cherdron,	*Cleveland*	110 Erie St.
Frederick E. Dilley,	*Cleveland*	3717 Euclid Av.
Ralph W. Elliott, Ph. B.,	*Cleveland*	855 Stark Av.
Henry Gerstenberger,	*Cleveland*	113 Linden St.
Homer H. Heath, B. S.,	*E. Cleveland*	58 Marloes Av.
W. C. Hill,	*Berlin Heights*	459 Euclid Av.
Leon Hirsh,	*New Brunswick, N. J.*	393 Jennings Av.
Alfred A. Jenkins,	*Cleveland*	38 White Av.
Henry C. Kelker,	*Mt. Gilead*	28 Cheshire St
Wade A. Lewis,	*Galion*	88 Lawnview Av.
George W. Magargee,	*Pordoe, Pa.*	162 Dodge St.
Frederick K. McCune,	*Buena Vista, Pa.*	37 Plymouth St.
Sidney M. McCurdy,	*Andover, Mass.*	42 Lawnview Av.
John F. Rudolph, A. B.,	*Cleveland*	68 Mansion St.
William E. Sampliner,	*Cleveland*	The Augusta.
Frederick M. Sayle,	*Cleveland*	1499 Cedar Av.
Edward J. Scanlon,	*Cleveland*	850 Woodland Av.
O. M. Shirey,	*Loveland, Colo.*	171 Dodge St.
John A. Sipher, A. B.,	*Cleveland*	442 Euclid Av.
C. E. Spring,	*Elyria*	141 Chestnut St.
Chauncey C. Stewart,	*Poland*	162 Dodge St.
John R. Stewart,	*Rochester, N. Y.*	818 Case Av.
Charles W. Thomas, A. B.,	*Cleveland*	1394 Woodland Hills.
Harry D. Vail,	*Cleveland*	190 Helen St.
John A. Vincent,	*Cleveland*	777 Superior St.
Harry S. Watterson,	*Cleveland*	564 E. Prospect St.
Richard Wedler,	*Cleveland*	160 Colfax St.
Wm. H White,	*Chandlersville*	459 Euclid Av.
Irvin S. Workman,	*Danville*	55 Sibley St.
Thomas C. Young,	*Cleveland*	1372 Woodland Hills.

THIRD YEAR, 35.

SECOND YEAR.

Charles Albl,	*Cleveland*	1406 Broadway.
Samuel S. Berger,	*Cleveland*	1859 Superior St.
John H. Brett,	*Cleveland*	34 Ocean St.
Shepard Burroughs,	*Northfield*	229 Euclid Av.
Arthur M. Cheetham,	*Cleveland*	805 E. Madison Av.
Albert E. Connell,	*Cleveland*	16 Dunham Pl.
J. R. Davis, D. D. S., D. D. Sc.,	*Cleveland*	99 Lawnview Av.
John B. Donaldson,	*Lorain*	154 N. Perry St.
John F. Flynn,	*Erie, Pa.*	The Ellington.
Henry G. Golden, A. B.,	*Willoughby*	99 Lawnview Av.
Isadore Goodman,	*Cleveland*	264 Columbus St.
Albert Grills,	*Elyria*	97 Rosedale Av.

Arden P. Hammond,	*Cleveland*	607 Lakeview Flats.
Harry Holibaugh,	*Marlboro*	753 Superior St.
Frank C. Hoskins,	*Grand Rapids, Mich.*	900 Fairmount St.
Perry F. King, B. S.,	*N. Georgetown*	99 Lawnview Av.
Emanuel Koblitz,	*Cleveland*	Broadway and Humboldt St.
Carl A. Lenhart, Ph. B.,	*Wauseon*	414 The Ellington.
J. George Mannhardt, Ph. G.,	*Galion*	698 Clark Av.
Russell H. McClure,	*Elyria*	613 East Av.
Carl E. Ochs,	*Kenton*	98 Herrick St.
Nicholas A. O'Connor,	*Cleveland*	224 Starkweather Av.
George Pay,	*Cleveland*	47 Chestnut St.
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David A. Prendergast,	*Cleveland*	61 Burton St.
W. A. Schlessinger,	*Cleveland*	129 McBride St.
Demba M. Spicer,	*Lagrange*	162½ Chestnut St.
John A. Staral,	*Cleveland*	1251 Willson Av.
Harry M. Tarr,	*Cleveland*	193 Clinton St.
Jesse E. Thompson,	*Bristolville*	2 Livingston St.
Bert E. Tyler,	*Cleveland*	51 Daisy Av.
John H. Wells,	*Glenville*	Lonsdale Av.
Leslie A. Woolf,	*Atwater*	507 Prospect St.
Micheal Cyrillus Yeagle, Ph. B.,	*Clyde*	761 Superior St.
Harvey E. Yoder,	*North Industry*	9 Wycombe Pl.
Samuel A. Young,	*Cleveland*	2370 Crosby Av.
William Otto Ziemer,	*Cleveland*	34 Woodbridge Av.

SECOND YEAR, 37.

FIRST YEAR.

N. S. Banker, A. B., Ohio State Normal.	*Canton*	739 Superior St.
Claude L. Difford, (Senior, Adelbert College.)	*Cleveland*	49 Alum St.
Carroll Cleveland Elliott, A. B., Adelbert.	*Cleveland*	855 Stark St.
Raymond L. Hobart, (Senior, Adelbert College.)	*Pemberville*	201 Adelbert St.
N. W. Ingalls, B. S., Baldwin University.	*Berea*	
J. Charles McFate, A. B., Grove City College.	*Cochranton, Pa.*	739 Superior St.
J. Douglas Pilcher, (Senior, Adelbert College.)	*Cleveland*	54 Auburndale Av.
Edward Peturcha, (Senior, Adelbert College.)	*Cleveland*	51 Goethe St.
S. H. Solmonson, B. S., Case.	*Cleveland*	1022 Case Av.
Lubor Charles Sykora,	*Avon Lake*	221 Osborn St.
Oliver A. Weber, (Senior, Adelbert College.)	*Miamisburg*	127 Murray Hill Av.
Arthur G. Wilcox, (Senior, Adelbert College.)	*Akron*	Adelbert Hall.

FIRST YEAR, 12.

SUMMARY.

Fourth Year	42
Third Year	35
Second Year	37
First Year	12
Total	126

REQUIREMENTS FOR ADMISSION.

SESSION 1902-03.

I. Graduates in Arts and Sciences of recognized colleges will be accepted without examination, on presentation of diploma.

II. Students who present certificates from recognized colleges, showing that the work of the Junior year in such colleges has been completed, will be accepted without examination.

III. Students who can not present certificates covering the entire work of the first three years in a recognized college, will be required to pass an examination upon the work in which they may be deficient. These examinations will be conducted by the Faculty of Adelbert College of Western Reserve University.

IV. Students in the Senior class of Adelbert College are permitted to take elective courses in the first year of the Medical College. Such electives are counted toward the academic degree, so that in this way students may save one year in the combined literary and medical courses.

ADMISSION TO ADVANCED STANDING.

Graduates in Arts or Sciences of recognized colleges who have, during their academic course, devoted to the subjects the number of hours, or have covered the text-books mentioned below or their equivalents, and have passed satisfactory examinations thereon, may be admitted to the second year of the course. But the amount of practical work in such courses must not be less than that required in the corresponding subjects during the first year in this college.

General Biology, 90 hours; Sedgwick and Minot, or Huxley and Martin. Comparative Anatomy, 75 hours; Kingsley or Wiedersheim. Embryology, 75 hours; Foster and Balfour, Hertwig, or Heisler. Human Anatomy, 120 hours. Histology, 200 hours; Böhm and Davidoff's, Schäfer's, Piersol's, Stöhr's, or Clarkson's Histology. Inorganic and Organic Chemistry, 300 hours. Physics, 60 hours; Carhart's University Physics, or Gage's Elements of Physics.

Graduates in Arts or Sciences who are deficient in Histology or Organic Chemistry may still be permitted to enter the second year on condition of making up the deficiency by private work and passing the examination on these subjects during the year. Students from other medical colleges will be admitted to advanced standing on the produc-

tion of satisfactory proof that they have completed the required preliminary work and also that comprised in the portion of the curriculum of this college from which exemption is sought.

Graduates in Medicine from other schools, who desire to apply for the degree of Doctor of Medicine in this school, must present satisfactory proof that they have completed the preliminary literary work required of the class to which they seek admission, must take at least the work of the fourth year, and must pass the examinations on all the subjects of this year, and any subjects of other years in which they may be deficient. Graduates in Medicine, or other students who desire to take special courses without graduation, will be admitted without examination. Such special courses will not count in any way for the degree of Doctor of Medicine in this College.

Examination of certificates for admission will take place in the college building on the two week days preceding the opening of the session. Candidates should attend at the college on either of these days, bringing their certificates with them. Diplomas or certificates may also be personally presented to the Registrar during the week preceding the opening, or forwarded to him at any time.

In accordance with the laws of certain states, not including Ohio, all persons desiring to practice medicine in these states are required to have attended, before taking the state examination, four full years at a regular medical college, whether they are graduates of a literary college or not. The attention of candidates for advanced standing is therefore called to this fact.

COURSES OF STUDY.

Number of Hours Per Week.

FIRST YEAR.

LECTURES AND RECITATIONS.

Anatomy ..... 4 hours
Chemistry ..... 3 hours
Histology and Microscopical Anatomy ..... 1 hour
Comparative Vertebrate Anatomy ..... 1 hour first half-year
Vertebrate Embryology ..... 1 hour second half-year

LABORATORY WORK.

Chemistry ..... 7 hours throughout the year
Bacteriology ..... 9 hours second half-year
Histology and Microscopical Anatomy ... 6 hours throughout the year
Comparative Vertebrate Anatomy ..... 3 hours first half-year
Vertebrate Embryology ..... 3 hours second half-year
Anatomical demonstrations and dissections throughout the year.

SECOND YEAR.

LECTURES AND RECITATIONS.

Physiology ..... 4 hours
Anatomy and Applied Anatomy ..... 4 hours
Pathology ..... 2 hours
Bandaging and Splints ..... 2 hours
Pharmacology and Materia Medica ..... 4 hours after March 1st
Physical Diagnosis ..... 1 or 2 hours last half-year

LABORATORY EXERCISES.

Physiology ..... 8 hours
Pathological Histology ..... 9 hours till March 1st
Demonstration in Gross Pathology ..... 1 hour
Pharmacology ..... 3 hours after March 1st

THIRD YEAR.

LECTURES AND RECITATIONS.

Pharmacology ..... 3 hours
Therapeutics ..... 3 hours
Obstetrics ..... 2 hours
Medicine ..... 3 hours
Surgery ..... 2 hours
Gynecology ..... 1 hour
Physical Diagnosis ..... 2 hours

DIDACTIC AND CLINICAL LECTURES.

Medicine ..... 4 hours
Surgery ..... 6 hours
Nose, Ear and Throat ..... 1 hour
Dermatology ..... 1 hour

LABORATORY EXERCISES.

Pharmacology ..... 2-3 hours before February 1st
Applied Anatomy ..... 1 hour
Pathological Demonstrations ..... 1 hour
Clinical Laboratory ..... 4 hours

FOURTH YEAR.

Daily work in Dispensary Section, 1 to 3 p. m., Lakeside Hospital. Individual Assignment for ward cases. Clinical Laboratory in connection with Clinics and Assigned Cases. Operative Surgery taught

to Sections in second half-year. Exercises in Obstetric Mannikin taught to Sections. Autopsies and Clinical Pathological material worked up throughout the year. No Sections to be detailed to Hospitals or Dispensaries in hours conflicting with schedule.

GENERAL CLINICS.

Medicine ..... 4 hours
Surgery ..... 6 hours
Gynecology ..... 2 hours
Obstetrics ..... As material offers

LECTURES.

Hygiene and Preventive Medicine ..... 2 hours
Jurisprudence ..... 1 hour

LECTURES, CLINICAL AND DIDACTIC.

Nervous Diseases ..... 1 hour
Pediatrics ..... 1 hour
Ophthalmology ..... 1 hour

Special clinics in medicine and surgery at St. Alexis or City Hospitals, two sections to half of class, two hours each per week.

SCHEDULE OF SUBJECTS, DAYS AND HOURS, 1901-1902.

FIRST YEAR.

MONDAY—Histology Recitation, 9 to 10 a. m. Anatomy, 11 to 12 a. m. Dissections, 1:30 to 5 p. m., first half-year; second half-year, Bacteriological Laboratory.

TUESDAY—Chemistry, 8 to 9 a. m. Chemical Laboratory, 9 to 12 a. m. Dissections, 1:30 to 5 p. m.

WEDNESDAY—Chemistry, 8 to 9 a. m. Histological Laboratory, 9 to 12 a. m. Comparative Anatomy and Embryology, 2 to 3 p. m. Dissections, or Anatomical Demonstration, 3 to 5 p. m., first half-year; Bacteriology, second half-year.

THURSDAY—Comparative Anatomy and Embryology, Laboratory, 8 to 11 a. m. Anatomy, 11 to 12 a. m. Dissections, 1:30 to 5 p. m.

FRIDAY—Chemistry, 8 to 9 a. m. Histological Laboratory, 9 to 12 a. m. Dissections, 1:30 to 5 p. m., first half-year; second half-year, Bacteriology.

SATURDAY—Chemical Laboratory, 8 to 12 a. m.

SECOND YEAR.

MONDAY—Physiology, 8 to 9 a. m. General Pathology, 9 to 10 a. m. Pathological Histology, 10 to 12 a. m. until March 1st; after March 1st, Pharmacology and Materia Medica, 10 to 12 a. m. Dissections, 1:30 to 3 p. m. Applied Anatomy, 4 to 5 p. m.

TUESDAY—Physiology, 8 to 9 a. m. General Pathology, 9 to 10 a. m. Pathological Histology, 10 to 12 a. m. till March 1st; after March 1st, Pharmacology and Materia Medica, 10 to 12 a. m. Dissections, 1:30 to 3 p. m. Anatomy, 3 to 4 p. m. Demonstration 4 to 5 p. m. Demonstration Bandaging, 5 to 6 p. m.

WEDNESDAY—Physiological Laboratory, 8 to 12 a. m. Dissection first half-year, 1:30 to 3 p. m.; Physical Diagnosis, second half-year, 2 to 3 p. m. Bandaging, 3 to 4 p. m.

THURSDAY—Physiology, 8 to 9 a. m. Demonstration Pathological Anatomy, 11 to 12 a. m. Pathological Histology, 9 to 11 a. m., first half-year. Pharmacology and Materia Medica, 10 to 12 a. m. after March 1st. Dissection, 1:30 to 3 p. m. Applied Anatomy, 4 to 5 p. m.

FRIDAY—Physiology, 8 to 9 a. m. Pathological Histology, 9 to 11 a. m. Quiz in Pathology, 11 to 12 a. m.; after March 1st, Pharmacology and Materia Medica, 9 to 12 a. m. Dissection, 1:30 to 3 p. m. Anatomy, 3 to 4 p. m. Demonstration, 4 to 5 p. m. Demonstration Bandaging, 5 to 6 p. m.

SATURDAY—Physiological Laboratory, 8 a. m. to 12 m.

THIRD YEAR.

MONDAY—Pharmacology, 8 to 9 a. m. Therapeutics, 9 to 10 a. m. Obstetrics, 10 to 11 a. m. Demonstration Pharmacology, 1 to 2 p. m. Pharmacological Laboratory, first half-year, 2 to 4 p. m. till Jan. 19. Applied Anatomy, 4 to 5 p. m.

TUESDAY—Medical Clinic, 8:30 to 10 a. m., Lakeside Hospital. Surgical Clinic, 10 to 12 a. m., Lakeside Hospital. Physical Diagnosis, 2 to 3 p. m. Clinical Laboratory, 3 to 5 p. m.

WEDNESDAY—Medical Recitation, 8 to 9 a. m., Charity Hospital. Medical Clinic, 9 to 10 a. m., Charity Hospital. Surgical Clinic, 10 to 11 a. m., Charity Hospital. Principles of Surgery, 11 to 12 a. m., Charity Hospital. Dermatology, 2 to 3 p. m. Pharmacological Laboratory, 3 to 5 p. m. till January 19.

THURSDAY—Pharmacology, 8 to 9 a. m. Therapeutics, 9 to 10 a. m. Obstetrics, 10 to 11 a. m. Gross Pathology, Demonstration, 11 to 12 a. m. Physical Diagnosis, 2 to 3 p. m. Medicine, 3 to 4 p. m., Lakeside Hospital. Applied Anatomy, 4 to 5 p. m.

FRIDAY—Therapeutics, 8 to 9 a. m. Gynecology, 9 to 10 a. m. Clinical Laboratory, 10 to 12 a. m. Nose, Ear, Throat, 2 to 3 p. m., Lakeside Hospital. Medicine, 4 to 5 p. m., College Building.

SATURDAY—Medicine, 9:30 to 10:30 a. m., Charity Hospital. Surgical Clinic, 10:30 to 11:30 a. m., Charity Hospital. Principles of Surgery, 11:30 to 12:30 a. m., Charity Hospital. Attendance on Autopsies as specially arranged.

FOURTH YEAR.

MONDAY—St. Alexis Hospital Clinic, after Jan. 1st, 8 to 9:30 a. m. Obstetrics, 10 to 11 a. m. Clinical Laboratory and Ward Cases, 10 to 12 a. m. Dispensary, 1 to 3 p. m. Nervous Diseases, 3:30 to 4:30 p. m., Lakeside Hospital; after Jan. 1st, Tuesdays. Physical Diagnosis, 4:30 to 5:30 p. m. at City Hospital till Jan. 1st.

TUESDAY—Medical Clinic, 8:30 to 10 a. m., Lakeside Hospital. Surgical Clinic, 10 to 12 a. m., Lakeside Hospital. Dispensary, 1 to 3 p. m. Surgical Diagnosis, 3 to 4 p. m., Lakeside Hospital; after Jan. 1st, on Monday.

WEDNESDAY—Medical Clinic, 9 to 10 a. m., Charity Hospital. Surgical Clinic, 10 to 11 a. m., Charity Hospital. Dispensary, 1 to 2 p. m. Pediatrics, 2 to 3 p. m., Lakeside Hospital. Hygiene and Preventive Medicine, 3 to 4 p. m.

THURSDAY—Clinical Laboratory and Ward Cases, 8 to 9 a. m., by sections. Obstetrics, 10 to 11 a. m. Gynecological Clinic, 11 to 12 a. m., Lakeside Hospital. Dispensary, 1 to 3 p. m. Medical Clinic, 3 to 4 p. m.

FRIDAY—Jurisprudence, 9 to 10 a. m. Surgical Clinic, 10 to 12 a. m., Lakeside Hospital. Dispensary, 1 to 3 p. m. Ophthalmology, 3 to 4 p. m., Lakeside Hospital. Hygiene and Preventive Medicine, 4 to 5 p. m.

SATURDAY—Gynecological Clinic, 8 to 9:30 a. m., Charity Hospital. Medicine, 9:30 to 10:30 a. m., Charity Hospital. Surgical Clinic, 10:30 to 11:30 a. m., Charity Hospital. Dispensary, 1 to 3 p. m. City Hospital Clinics, 2 to 5 p. m., to Jan. 1st.

DISPENSARY SECTIONS.

SECTION.	1	2	3	4	5	6	7
Oct. 7 to Nov. 2,	Eye	Paed.	Med.	N. D.	Surg.	Gyn.	N. E. T.
Nov. 4 to Nov. 30,	N. E. T.	Eye	Paed.	Med.	N. D.	Surg.	Gyn.
Dec. 2 to Jan. 4,	Gyn.	N. E. T.	Eye	Paed.	Med.	N. D.	Surg.
Jan. 6 to Feb. 1,	Surg.	Gyn.	N. E. T.	Eye	Paed.	Med.	N. D.
Feb. 3 to Mar. 1,	N. D.	Surg.	Gyn.	N. E. T.	Eye	Paed.	Med.
Mar. 3 to Mar. 29,	Med.	N. D.	Surg.	Gyn.	N. E. T.	Eye	Paed.
Mar. 31 to Apr. 26,	Paed.	Med.	N. D.	Surg.	Gyn.	N. E. T.	Eye

After January 1st sections will visit St Alexis Clinics according to special arrangement.

DEPARTMENTS AND METHODS OF INSTRUCTION.

CHEMISTRY.

PROFESSOR HOBBS.
MR. EVANS.

Chemistry extends throughout the entire first year and consists of three hours of lectures and recitations and eight hours of laboratory work a week.

The course opens with a preliminary review on inorganic Chemistry and qualitative chemical analysis, which covers about two month's time, and the balance of the first half of the year is devoted to lectures on general organic Chemistry, chemical philosophy and quantitative chemical methods and allied subjects. The last half-year is devoted to lectures on special subjects, such as the chemistry of foods, their composition and analysis, animal secretions and especially the urine, both normal and pathological, and the general application of chemical methods in clinical examinations.

The laboratory work during the first half-year consists of a short course of qualitative chemical analysis, then the qualitative examination of the more common articles of food and animal secretions and the study of the various chemical reactions involved; also the preparation of some of the more common organic preparations. The last half of the year is devoted, mostly, to the quantitative chemical methods of analysis. The preparing of standard solutions and the quantitative chemical analysis of many of the food products and animal secretions, both under normal and diseased conditions. The laboratory work is all supplemented by a course of lectures involving full description of the laboratory methods.

Besides the regular course as above outlined, the special laboratory is open at all times for any extra or advanced work. It is completely equipped for any special work and every aid will be given to any who desire to avail themselves of its use.

ANATOMY.

PROFESSOR HAMANN.
DR. TIERNEY.

The course in anatomy consists of lectures upon descriptive and applied anatomy, together with demonstrations, recitations and quizzes. In order to facilitate the work in osteology, students of the first year are provided with separate portions of the skeleton, which they are permitted to take to their rooms for study. Three hours in recitations, and eight hours for dissecting, in suitable periods weekly,

are given to anatomy during the first year. Students are required to dissect all parts of the cadaver at least once. For demonstrations upon the cadaver and anatomical preparations the second year class is divided into a number of small sections, whose meetings take the form of anatomical conferences rather than of formal demonstrations. Each individual student thus has an excellent opportunity for becoming familiar with the various parts of the body, and for receiving direct personal instruction. Four hours a week are given to lectures and recitations in the second year and ten hours a week to dissecting. In the third year instruction is given by lectures and recitations in applied anatomy.

HISTOLOGY AND EMBRYOLOGY.

PROFESSOR WAITE.

HISTOLOGY AND MICROSCOPICAL ANATOMY.

The course includes work upon the fundamental mammalian tissues followed by the study of the finer anatomy of the mammalian organs. The sections used are human tissue in large part, supplemented by tissue from other mammals. An essential part of the work is training in the standard methods of technique. Each student stains and mounts over two hundred sections which he later studies, describes and draws. He is required to carry a considerable number of tissues through all the steps of preparation, including removal from the animal, fixation by several methods, hardening, dehydration, infiltration, embedding in celloidin and in paraffin, sectioning, including serial sectioning, staining in toto, in sections and on the slide and mounting. The rapid preparation with the freezing microtome and the special methods for blood examination are used.

The recitations supplement the laboratory work and aim to bring out those points which the student does not see in his sections. One recitation and six hours laboratory work per week throughout the Freshman year.

COMPARATIVE VERTEBRATE ANATOMY.

The aim of this course is to acquaint the student with the more important characteristics of the classes of vertebrates, and also to prepare for the experimental work in physiology. The student dissects, as carefully as the time will allow, representatives of the different classes of vertebrates. The lectures deal with the modifications of the several systems of organs in the vertebrate series and are supplementary to assigned reading in a standard text-book. One lecture and three hours laboratory work per week, first half Freshman year.

VERTEBRATE EMBRYOLOGY.

This course endeavors to instruct the student in the fundamental facts of vertebrate development. The laboratory work deals with cleavage and gastrulation, followed by the study of the development of the chick to the end of the fourth day. Certain later steps in the development of the pig are then studied. In the recitations emphasis is laid upon the development of the human embryo. One recitation and three hours laboratory work per week, second half Freshman year.

PHYSIOLOGY.

PROFESSOR STEWART.

The course includes two lectures, illustrated by diagrams and experiments, two conferences or quizzes, and eight hours laboratory work a week for each student throughout the second year.

For the practical work on mammals, which is made a special feature of the course, the class is divided into sections of four men; in experiments on frogs two men work together; in other experiments each man works for himself.

SYNOPSIS OF LABORATORY WORK.

BLOOD. Chemistry; coagulation; spectroscopic examination of hæmoglobin and its derivatives; other tests for blood-pigment; globulicides; enumeration of the colored and white corpuscles and estimation of the hæmoglobin in human blood; specific gravity.

CIRCULATION. Circulation in a frog's web; heart tracings; action of mammalian heart; action of vagus and sympathetic nerves on heart; action of muscarin and atropia on heart; action of valves of heart; cardiographic, sphygmographic and plethysmographic tracings; blood-pressure tracings; effect of stimulation of nerves (vagus, sciatic, depressor), of asphyxia, of supra-renal extract, of albumoses, of the position of the body, and of hæmorrhage and transfusion on the blood-pressure; section and stimulation of the cervical sympathetic; determination of the circulation time.

RESPIRATION. Respiratory tracings; effect of section and stimulation of nerves (vagi, sciatic, superior laryngeal) on respiration; measurement of heat and carbon dioxide given off in respiration; influence of respiration on the blood-pressure; influence of temperature on the respiratory centre.

DIGESTION AND ABSORPTION. Chemical and physiological properties of saliva, gastric juice, pancreatic juice and bile; effect of stimulation of the chorda tympani on the secretion of saliva; evacuation of stomach by tube or emetic to obtain normal chyme; gastric fistula; examination of fæces, time required for digestion and absorption of various food substances, etc.

URINE. Qualitative examination; quantitative determination of chlorides, phosphates, sulphates, urea, uric acid, total nitrogen, proteids, sugar.

METABOLISM. Glycogen; experimental glycosuria, including phlorhidzs in diabetes; variations in amount of urea with quantity of proteids in food: thyroidectomy.

MUSCLE AND NERVE. The various kinds of stimuli; the curve of muscular contraction; action of curare, veratria and supra-renal extract on the muscle-curve; influence of temperature, load and fatigue on the muscle-curve; seat of exhaustion in fatigue; superposition of stimuli; genesis of tetanus; velocity of the nerve impulse; chemistry of muscle.

ELECTROPHYSIOLOGY. Galvani's experiment; contraction without metals; secondary contraction; demarcation current and current of action; electrotonus; Pfluger's formula of contraction; Ritter's tetanus; positive and negative polarisation.

CENTRAL NERVOUS SYSTEM. Section and stimulation of nerve-roots; reflex action; action of strychnia; excision of cerebral hemispheres (in frog); stimulation of motor areas.

SPECIAL SENSES. Formation of retinal image; change of curvature of lens in accommodation; determination of near and far points of vision; mapping of the blind spot; effect of light, atropia and stimulation of cervical sympathetic on the pupil; Kühne's artificial eye; ophthalmoscopic examination of the eye; color mixing.

PHARMACOLOGY AND MATERIA MEDICA.

PROFESSOR SOLLMANN.

DR. HATCHER.

The course comprises 40 hours of lectures and recitations, and 30 hours of laboratory work in the last ten weeks of the second year; and 30 hours of laboratory and 100 hours of lectures and recitations in the third year.

In the second year are taught the preliminary subjects of pharmacognosy, metrology and pharmacy, in as far as they are important for medical students; introduction to prescription writing, flavoring and materia medica of flavors; incompatibilities and solubilities; general principles of pharmacology; and the strychnia, caffein and picrotoxin groups. Outline lectures, illustrated by such experiments as can be profitably demonstrated to a class, are given on subjects previously assigned for reading. These are followed in the next lesson by recitations on the same topics. The laboratory work in this year is designed to familiarize the students with the chemical properties of important

drugs, their incompatibilities, isolation and identification; action upon ferments, upon blood, etc.; chemical action of caustics; compounding of single prescriptions, etc.

The course in the third year comprises lectures and recitations on the action of drugs, their symptomatology, toxicology, therapeutical uses, and materia medica. Whilst the presentation of these subjects is based as far as possible upon experimental data, care is taken to point out the practical application of the ascertained facts, the course being intended as a foundation to clinical therapeutics. For this reason, occasion is also taken to bring together and compare those drugs which act upon the same organ or disease. For the main part, however, the drugs are arranged into large groups, the principal member of each group being studied in detail, whilst the less important are introduced incidentally. The arrangement of lectures, demonstrations and recitations is as in the second year. From time to time there are given exercises in prescription-writing, intended to familiarize the students with the methods of administering the substances which have been studied. The instruction in materia medica is confined to those facts which have a practical value to the medical student. An extensive collection of drugs is kept easily accessible.

The laboratory work is designed to illustrate the actions of important drugs upon animals. The experiments are arranged by methods rather than by drugs, the practical work being kept entirely separate from the lecture course. It serves in this way partly as a review of the latter. The results of the experiments are recorded in detail, the records being assigned to students for the preparation of papers which are read and discussed before the class, as far as time permits.

PATHOLOGY.

PROFESSOR HOWARD.

DRS. PERKINS, PARKER AND DARBY.

Instruction in this department is given by lectures, laboratory work, and demonstrations of fresh and prepared specimens. The most important feature of this course is the laboratory work done by each student.

Bacteriology. Drs. Perkins and Parker. Laboratory work in this course is given three half days a week from March 1 to the end of the first year. The subject is elucidated by informal lectures, demonstrations, and experiments on animals, as occasion requires. The student, after having prepared the various media required, is instructed in the principles of disinfection and sterilization, the bacteriological examination of air, water and soil, and the methods of cultivating, staining and studying bacteria. The pathogenic bacteria and various molds and yeasts are then studied Altogether from thirty to thirty-

five different micro-organisms are studied by each student. Students are trained in the employment of bacteriological methods in medical and surgical diagnosis, and those who prove themselves capable are permitted to pursue investigations along special lines, on subjects assigned them by the professor in charge.

PATHOLOGICAL HISTOLOGY. PROF. HOWARD AND DR. PARKER. The course comprises nine hours a week of laboratory work for the first five months of the second year. It begins with the study of the various forms of tissue degeneration and necrosis. This is followed by the study of inflammation in the frog's mesentery and in sections of hardened tissue, showing all the various forms of inflammatory processes. The infectious granulomata are then taken up, and the forms and special characters of the reaction of the tissues to the specific organisms of infectious diseases are demonstrated. The study of the various pathological processes is based upon their ætiology, and in addition to human tissues, the material from the experiments on animals in the bacteriological course is used for this purpose. The effects of bacterial and other toxines upon the tissues is taught in the same manner. Tumors are next considered. Based upon the above as a ground work, the pathological histology of the various organs and systems is studied. The use of fresh frozen sections of material derived from autopsies, the operating room and animal experiments forms an important feature of the course. Each student receives and is required to stain, mount, carefully study and draw from two hundred and fifty to three hundred sections.

DEMONSTRATIONS OF GROSS PATHOLOGICAL ANATOMY. PROF. HOWARD, AND DRS. PARKER AND DARBY. Demonstrations are made to second and third year students from the large amount of fresh material derived from autopsies and from the surgical and gynecological clinics. Students are required to handle and describe specimens and to make diagnoses from the gross appearances, the macroscopical diagnosis of tumors being an important feature. The hospital connections of the laboratory are such that students can be trained in making autopsies and in writing protocols of the lesions found.

GENERAL PATHOLOGY. PROF. HOWARD. Two lectures a week are given to the second year class. In these lectures the various infectious diseases, immunity, the degeneration and regeneration of tissue, the ætiology of tumors, and the special pathology of the various organs and systems are considered.

ADVANCED AND SPECIAL WORK. A special room, well lighted and equipped, is provided for physicians and advanced students who wish to undertake special work in pathological histology, experimental pathology and bacteriology. The additions to the pathological labora-

tory at Lakeside Hospital include a large students' laboratory for systematic courses in bacteriology, pathological histology and clinical microscopy for second and third year students; a clinical laboratory for the examination of urine and other discharges, a room for the microscopical examination of blood, pus, urinary and other sediments, tumors, etc., and a separate room for the study of sputum, and fæces. Besides these there are two research rooms, two private rooms for assistants, and one preparation and store room. All these laboratories will be fitted not only with all necessary apparatus and fixtures, but all the work tables will be provided with electric lights.

CLINICAL LABORATORY.

DR. LADD.

The new clinical laboratory at Lakeside Hospital is thoroughly equipped with all the necessary apparatus for making complete examinations of the various secretions and excretions, normal and pathological; the blood, urine, sputum, gastric contents, fæces, etc.

Microtome for frozen sections and celloidin work and the various necessary stain and reagents are at the disposal of the students, they being required to apply the methods of technique taught in the laboratory in the study of special cases assigned to them in the hospital wards. A large room of the clinical laboratory is devoted exclusively to the fourth year class, and the main lecture room is devoted entirely to the third year class who are given systematic instruction throughout the session. The fourth year students are required to apply the knowledge thus gained in working up the cases assigned to them during the fourth year. Special rooms are equipped for the examination of sputum and making chemical tests; also a dark room is fitted up for doing polaroscopic and hæmoglobin work. A few rooms are available for the use of special workers, these rooms to be asigned at the discretion of the direetor of the laboratory. Microscopes and other instruments are available for the work in this department. The total laboratory capacity contains 2,600 square feet.

Clinical Microscopy. Work in this department will cover the third and fourth years. The third year work will comprise a systematic course, consisting of two laboratory exercises a week throughout the term, on blood, sputum, gastric juice, urine, fæces and pathological exudates.

The technique employed in doing paracentesis of the chest, abdomen and spinal canal; in taking throat, blood, bladder and uterine cultures as well as the further examination of the products obtained, will be carefully outlined.

The methods of preparing material obtained at the operating table for microscopical examination will be shown and each student required to do such work before the completion of his course. The object of this course is not only to cover the ground outlined above, but to prepare the student for independent work. In the fourth year the students will work in small groups in the room assigned to them and especially equipped for their use. They will receive no systematic instruction, but will work under the direction and control of the instructor. Their work will consist of the examination of urine, blood, sputum, gastric juice, fæces, and purulent and other discharges from their ward and dispensary cases as well as of tumors and other material removed at operations. This work is obligatory, is done in connection with the students' own clinical cases, and is therefore thoroughly practical.

THERAPEUTICS.

PROFESSOR DARBY.

Three hours a week are devoted to Therapeutics during the third year. The teaching is done mainly by means of lectures and quizzes, designed to make the student familiar with all the resources of Therapeutics and enable him to make an intelligent and satisfactory use of them in his future work. Medicines are studied in groups based on their therapeutic affinities, and individually in their application to disease. Careful attention is paid to dossage, the time and mode of administration, influences and conditions which may modify their actions, the effect of toxic doses, the treatment of poisonings and of drug habits. Electrotherapy, Kinesitherapy, including Massage and Rest-Cure. Psychotherapy, including Hypnotism and Suggestion. Serotherapy, Hydrotherapy and Balneotherapy. Dietetics and Climatology are carefully studied in their relation to pathological conditions. The aim of the course is to give the student a thorough and practical knowlege of all the means and methods used in the "treatment and prevention of disease, which is the ultimate aim of all medical research."

PHYSICAL DIAGNOSIS.

PROFESSOR HOOVER.

DRS. OSBORN, MERRIAM, SEASON AND MOOREHOUSE.

Physical diagnosis is taught in the second and third years. During the second year the student is taught to recognize and elicit all of the physical phenomena of the circulatory and respiratory organs and abdominal viscera that are demonstrable by inspection, palpation and auscultation. Pathological cases are shown only as they are found necessary for the demonstration and explanation of physiological signs. At the end of the year each student is required to demonstrate the normal physical signs of the thorax and abdomen. During the third year

physical diagnosis is taught from pathological cases. The students are required to demonstrate at every exercise, and are also given opportunity to practice in the dispensary and hospital wards. The final examination in this course is a practical one. Each student is required to examine a patient, describe the physical signs and make an eliminative physical diagnosis.

THEORY AND PRACTICE OF MEDICINE.

PROFESSOR LOWMAN.
PROFESSOR SAWYER.
DRS. OSBORN, MERRIAM, SEASON, MOOREHOUSE, AND GEIB.

The teaching of medicine is done in the third and fourth years. Lectures, largely clinical, are given to both classes, and the largest possible number of students make direct observation of the patients presented. It is found that very often the whole class can individually verify the conditions described by the lecturer, and this plan has proved of great advantage in the presentation of the cases. The third year class will receive two hours per week in text book work, in which internal medicine not provided for in special departments will be covered in recitation and discussion. The same class has three hours of clinics, and is assigned to the individual study of select dispensary cases. Clinical laboratory drill is made a decided feature of this year's work. In the fourth year the class is taught medicine by clinics, by drill in sections in the dispensary, by the assignment to ward cases, in connection with which the fullest use of the clinical laboratory will be insisted upon. Throughout the course thus outlined, the endeavor is made to develop not only the knowledge of diseases and their diagnosis, but also to thoroughly consider the use of remedies.

SURGERY.

PROFESSOR ALLEN.
PROFESSOR BUNTS.
PROFESSOR CRILE.

DRS. BECKER, BRIGGS, HERRICK, GRIFFITHS, LOWER, AND BIRGE.

Surgery is taught by means of lectures and demonstrations. During the second year one hour weekly is devoted to the systematic instruction in the application of bandages, splints and in minor surgery. In addition to this the students are given practical drill, in sections, in the application of bandages and splints. During the third year the students receive two hours of lectures weekly upon the principles of surgery, and section work in Charity Hospital dispensary. A course of one hour a week is given in surgical diagnosis. The material from the dispensary of Lakeside Hospital is used for the latter course. There

are at least four hours weekly devoted to public clinics, and there is instruction of one hour weekly during a period of six months, in genito-urinary surgery. In addition to this a laboratory course has been arranged for the purpose of instruction beside that given during the second year in the line of general pathology. In this course students are taught to examine blood, and pus, to make cultures, to innoculate animals, to cut sections and make diagnosis of tumors and to perform personally all the laboratory work incident to the diagnosis of surgical cases. This course occupies, in conjunction with a similar course in clinical medicine, from four to six hours weekly during the entire year.

During the fourth year the student attends clinics six hours weekly. After January 1st, there is an additional clinic of one and a half hours weekly, in which instruction is given to sections of ten or twelve men. Optional clinics are given every Saturday afternoon from the beginning of the term until January 1st, at the City Hospital. A course is also given in operative surgery, utilizing all means necessary for the best development of instruction in this department. Throughout the fourth year, also, the student is given cases for examination and diagnosis, upon which complete reports are required. Provision is made in the clinical laboratory for the complete examination of these cases by all laboratory methods. The student is required to examine the blood, sputum, urine, fæces, to make sections and diagnosis of tumors and investigate infections, and to make exhaustive reports, which shall be compared with those made by the clinical staff of the various hospitals In addition to this the class is divided into sections for daily work in the dispensaries. For the purposes of instruction the material is ample, clinics being given at Lakeside, Charity, St. Alexis and the City Hospitals.

OBSTETRICS.

PROFESSOR POWELL.

DRS. CLARK, THOMAS, AND WOOLGAR.

Instruction in this course begins with the third and continues through the fourth year, two lectures a week throughout each year. The plan includes didactic lectures, quizzes, practical demonstrations and bedside instruction. Lectures are illustrated freely by charts, diagrams, models and operations upon the mannikin. Students are required to become familiar with the use of the various obstetric instruments. The Senior class is divided into small sections and given practical work outside of schedule hours.

Each Senior student is expected to attend from three to five cases of labor under the supervision of the Professor of Obstetrics, or his assistant. The work of the class is chiefly practical.

GYNECOLOGY.

PROFESSOR ROBB.

PROFESSOR HUMISTON.

DRS. THOMAS AND SUNKLE.

Gynecology is taught by a weekly didactic lecture, lasting one hour, and by supplemental quizzes during the third year; through the fourth year two hours a week are devoted to clinical instruction. The patients admitted to the wards of the Lakeside, Charity and City Hospitals for laceration of the perinæum and for vaginal, vesical, uterine, tubal and ovarian disease, will be shown either at the regular clinics in the amphitheatre or will be made the subjects of teaching at the bedside. Instruction will be given in the wards, so far as it is possible, upon the management of such cases during the period immediately following operation and during the period of convalescence. As a rule, each student will have an opportunity of performing some minor operation.

The work in the dispensary at Lakeside and Charity Hospitals will include history-taking and the ordinary methods of examination, the diagnosis and treatment of cases. This instruction is given daily during the school year to the students of the fourth year. For this work the class is divided into sections, so that each student can receive individual attention. Students in turn will be permitted to examine patients, and suitable cases will be operated upon before the class.

DERMATOLOGY AND SYPHILOLOGY.

PROFESSOR CORLETT.

DR. CARTER.

Instruction in this department is given to the third and fourth year classes. Clinical lectures are given once a week to the third year students throughout the college year. It is the endeavor to cover the whole field of dermatology with these demonstrative lectures. When necessary lantern-slide plates and other illustrations are used to further elucidate the subject of diseases of the skin. During the course the class will be quizzed by the assistant in Dermatology.

The Senior class is divided into sections and given practical instruction in the clinics three times a week. Thus the common diseases of the skin, as well as many of the more rare forms, are studied and progress under treatment noted. Ample opportunity is given to apply dressings and each student is called upon to make diagnoses and outline courses of treatment under the immediate supervision of the instructor. Clinical material is abundant.

DISEASES OF THE NOSE, THROAT AND EAR.

DR. INGERSOLL.

DR. LINCOLN.

DRS. CHILDS AND LARGE.

Didactic lectures on these diseases are given once a week during the third year. Clinical instruction is given during the fourth year and consists in daily work in the dispensary of Lakeside Hospital. Each section of the class is in turn given personal instruction in the use of instruments for examination and operation and also in the diagnosis and treatment of the various cases.

DISEASES OF CHILDREN.

PROFESSOR CUSHING.

DRS. CLARK AND THOMAS.

The instruction in this course, given in the fourth year, consists of a weekly clinical lecture and recitation, followed by a ward visit. Abundant illustrative material is obtained from the Lakeside Hospital dispensary and the children's ward.

OPHTHALMOLOGY.

PROFESSOR MILLIKIN.

DRS. BRUNNER, HERRICK, AND SHACKLETON.

The method of instruction is largely clinical with didactic teaching interspersed. It is given to the Senior class. The class is divided into sections, each one being assigned in rotation to cases for examination in the dark room. Each student will be given cases for special study, and is expected to make a report upon them before the class, and will be subject to quizzing by members of the class and the instructor. The aim is to teach the diagnosis and methods of treatment of the external diseases of the eye, and to give a working knowledge of the uses of the ophthalmoscope. The eye department has separate wards in Lakeside Hospital in which students have opportunities for seeing work at the bedside. The class will be divided into sections for instruction with the ophthalmoscope, and for daily work in the dispensary rooms during the year. This department has abundant facilities, appliances and material. A large "dark room" with ten lights, a Javal-Schiötz Ophthalmometer, a perimeter, test cases and ophthalmoscopes for practical ophthalmology are provided. A Haab's magnet has recently been added to the equipment.

NEUROLOGY.

PROFESSOR UPSON.

DRS. SPENCE AND HUTCHINS.

Instruction in this branch of medicine is clinical and occupies one hour a week throughout the fourth year. In connection with the cases shown the class is instructed in the use of the different forms of electric current for diagnosis and treatment, and in other diagnostic methods. The material of the City Hospital is utilized from the beginning of the school year up to January 1. Cases of nervous diseases in the hospital proper are shown, and the class is taken through the wards of the Department of the Insane and instruction given in the different forms of mental disturbance. During the remainder of the year material for demonstration is drawn from the Neurological Clinic of the Dispensary and from the wards of Lakeside Hospital.

HYGIENE AND PREVENTIVE MEDICINE.

PROFESSOR ASHMUN.

Hygiene and Preventive Medicine are included in the fourth year, and will occupy two hours a week. In hygiene the course will include consideration of heredity; normal development of individuals and races; climatic and meteorological influences; the essentials and accessories to life and health; effects of habits of life and occupation; individual family and community sanitation.

The course in Preventive Medicine is given by lectures, conferences, theses by students on topics assigned. It includes consideration of the pathology, natural history, channels and means of dissemination, together with methods of limiting the spread of infectious diseases, the duties and powers of public officers of health; value and manner of keeping vital statistics; the relation and duties of the physician to the public in matters pertaining to the public health, etc.

MEDICAL JURISPRUDENCE.

DR. CARTER.

Throughout the first half-year, one lecture a week is given to the fourth year class on the subject of Medicine in its relations to the existing laws, and to the various decisions, which are rendered from time to time in important medico-legal cases. Taking up the question of real and apparent death, homicide, wounds, survivorship, identity, the determination of stains, feigned diseases, life insurance, etc., and considering in brief the relationship existing between the law and the practice of medicine.

TEXT-BOOKS.

Chemistry—Witthaus, Bartley, Prescott and Johnson.

Anatomy—Gray, Morris.

Histology and Microscopical Anatomy—Böhm-Davidoff-Huber.

Comparative Anatomy—Kingsley or Wiedersheim.

Embryology—Heisler.

Bacteriology—Abbot, Sternberg, Lehmann and Neumann.

Physiology—Stewart's Manual; for reference, Schäfer's Physiology.

Pathology—Ziegler.

Pharmacology and Materia Medica—Sollmann.

Therapeutics—Wood, Brunton, Bartholow, Shoemaker, Butler, Schmiedeberg.

Medicine—Wood & Fritz, Strumpell, Osler.

Surgery—American Text-book of Surgery, Koenig's Surgery, Warren's Surgical Pathology.

Gynecology—Diseases of Women (Dudley), An American Text-book of Gynecology (Baldy), A Text-book on Gynecology (Reed), Practical Gynecology (Montgomery), Hart and Barbour's Manual of Gynecology. Books of reference, Pozzi, Fritsch, Aseptic Surgical Technique (Robb).

Obstetrics—Jewett, Reynolds, Davis, Hirst.

Dermatology—Crocker, Hardway, Jackson, Morrow's System of Dermatology, Corlett's Acute Exanthemata.

Neurology—Church and Peterson, Dercum, Dana. Books of reference, Gowers, Berkley on Mental Diseases.

Ophthalmology—American Text-book, De Schweinitz, Norris and Oliver, Fuchs, Noyes.

Nose, Ear and Throat—American Text-book, Kyle, Politzer, Bacon, Buck, Coakley, Bishop.

Hygiene and Preventive Medicine—Stevenson and Murphy, Egbert, Abbot.

Physical Diagnosis—Vierordt's Medical Diagnosis.

Diseases of Children—Holt's Infancy and Childhood, Jacobi's Therapeutics of Infancy, Ashby and Wright.

Medical Jurisprudence—Taylor's (A. S.) Medical Jurisprudence, Taylor's (A. N.) The Law in its Relation to Physicians.

EXAMINATIONS, 1902.

FIRST YEAR CLASS

Comparative Vertebrate Anatomy—Tuesday, February 4th.

Embryology—Saturday, May 24th.

Histology—Monday, May 26th.

Osteology—Tuesday, May 27th.

Chemistry—Wednesday, May 28th.

Bacteriology—Thursday, May 29th.

SECOND YEAR CLASS.

Pathological Histology—Friday, February 28th.

Anatomy—Tuesday, May 27th.

Physiology—Practical, Wednesday, May 28th, 8 to 11 a m.; 1 to 4, p. m. Written and oral, Thursday, May 29th, 8 a. m.

Minor Surgery—Saturday, May 24th.

Pharmacology—Practical, May 16th, 9 a. m. to 12 m. Written and oral, Friday, May 23d, 9 a. m. to 12 m.

Physical Diagnosis—Monday, May 26th.

THIRD YEAR CLASS.

Therapeutics—Monday, May 26th.

Pharmacology—Materia Medica, written and oral, 1:30 to 4:30 p. m., Tuesday, May 27th. Practical, Monday, January 19th, 1903, 1:30 to 3:30 p. m.

Obstetrics—Thursday, May 29th.

Medicine—Wednesday, June 4th.

Surgery—Thursday, June 5th.

Pathology—Friday, June 6th.

Physical Diagnosis—Thursday, May 15th to 29th.

Gynecology—Saturday, May 31st.

Anatomy—Wednesday, May 28th.

Ear, Nose and Throat—Wednesday, June 4th.

Dermatology—Monday, June 2d.

Clinical Laboratory—Tuesday, June 3d.

FOURTH YEAR CLASS.

Neurology—Monday, May 26th.

Obstetrics—Tuesday, May 27th, 10 a. m.

Surgery—Tuesday, June 3d.

Physical Diagnosis—Thursday. May 29th.

Gynecology—Thursday, June 5th.

Ophthalmology—Friday, May 23rd.

Medicine—Saturday, May 31st.

Gynecology—Monday, June 2d.

Surgery—Wednesday, May 28th.

Medicine—Wednesday, June 4th.

Jurisprudence—Saturday, May 24th.

Hygiene and Preventive Medicine—Friday, June 6th.

Pediatrics—Tuesday, May 27th, 2 p. m.

GENERAL INFORMATION.

TERMS AND VACATIONS.

The College session will open on October 1st, each year, unless this date falls on Sunday, in which case the opening shall be on October 2nd.

There will be a holiday vacation of two weeks, beginning on December 24th. There will also be a vacation of two days preceding Easter Sunday. No College exercises will be held on Thanksgiving Day, Washington's Birthday or Decoration Day.

SITUATION OF BUILDINGS.

The Medical College stands at the corner of Erie and St. Clair Sts., about five minutes' walk from center of the city.

The Lakeside Hospital fronts on Lake Street, corner of Muirson Street—five minutes' walk from the college. St. Vincent's Hospital (Charity) fronts on Perry Street, corner of Central Avenue. The Home of Maternity is on Woodland and Longwood Avenues. The St. Alexis Hospital is located at the corner of Broadway and McBride St. and is reached by the Broadway car line. The City Hospital fronts on Scranton Avenue, and is reached by either Jennings Avenue or Pearl Street and Brooklyn cars. The Medical Library building is at 586 Prospect Street.

ENDOWMENTS.

This College is indebted to the Perry-Payne Family for the valuable ground upon which its buildings have been erected, as well as for other generous assistance from time to time. In addition there are the following special funds:

The John L. Woods Fund.
The H. B. Hurlbut Fund.
The John Huntington Fund.
The John A. Vincent Fund.
The H. Melville Hanna Fund.
The Leonard Hanna Endowment for the Chair of Clinical Microscopy.

It is also under a lasting bond of gratitude and obligation to other generous donors of funds for the erection of buildings, and the endowment and equipment of laboratories and dispensaries, who have permanently increased its resources and advantages to students of medicine.

THE H. M. HANNA RESEARCH FELLOWSHIP.

This Fellowship has been founded by Mr. H. M. Hanna for encouragement of research in Physiology and Pathology, and is open to graduates of any medical school.

The occupant of the post will be expected to devote himself to original investigation in Physiology or Pathology in this college under the guidance of the Professor, who shall suggest a subject for research or approve one submitted by the Fellow himself. All applicants must produce evidence of fitness for engaging in such work.

The income of the Fellowship is about $600 a year. It is tenable, in the first instance, for one year, but a Fellow who has done exceptionally good work may be reappointed for a second term.

LIBRARIES.

The Free Public Library, 175,000 volumes, Case Library, 50,0000 volumes, Hatch Library, 50,000 volumes, and the library of the Cleveland Medical Library Association are accessible to students of this College, and, with the exception of the Hatch Library, are within a few minutes' walk of the Medical College. By special arrangement of the Faculty members of the Senior class of this College may have the reading privileges of the Medical Library Association's books and journals during the year. This Library now has on its shelves more than 9,000 bound volumes, and one hundred and fifty Medical Journals are on file in the reading rooms. There are more than two hundred volumes of modern text-books and medical works. In addition there are small working libraries in the laboratories of the College itself.

LABORATORIES.

CHEMISTRY.—A chemical laboratory building with over six thousand five hundred square feet of floor space, has been erected to the south of the main college building, and in connection with it. The laboratories are thoroughly equipped for all the details of the course, and each student has a separate desk assigned him with a general supply of apparatus. Extra and special apparatus is furnished upon requisition. A special laboratory has been furnished for the work of advanced students, and every effort made to make it as complete as possible, with facilities for original and special work.

ANATOMY.—The dissecting room is well lighted with electricity, heated and ventilated and provided with modern appliances. The anatomical rooms have about three thousand square feet of floor space. Anatomical material is preserved at all seasons of the year.

HISTOLOGY AND EMBRYOLOGY.—The laboratory is well lighted by a north and east exposure, with means for artificial light on dark days. Enough Leitz microscopes are owned so that each student has one for his individual use, available at all times. There is a good equipment of microtomes, ovens, glassware, stains and reagents.

BACTERIOLOGY.—The work in bacteriology is carried on in the pathological laboratory. Students are required to provide their own material for drawings. Microscopes, culture media and animals are provided without charge, and material for staining and mounting specimens, to be retained by students at cost. The laboratory has the benefit of excellent lighting with space for individual work.

PHARMACOLOGY.—There is a large, well-lighted laboratory of two thousand one hundred square feet, devoted exclusively to this subject and fitted up for animal and chemical work. Apparatus and material are furnished without extra charge. The laboratory is open for advanced work in this department. A special laboratory for research has just been added.

PHYSIOLOGY.—The teaching laboratories comprise three well-lighted rooms with an aggregate floor space of nearly four thousand square feet. The room for experimental physiology is fifty by thirty feet, the room for chemical physiology measures thirty-five by thirty feet, and the lecture room, devoted exclusively to physiology, is capable of accommodating one hundred and forty students. The equipment for teaching practical physiology permits more than forty students to work in a class at one time, some in the chemical and some in the experimental room. Several separate rooms are available for research. There is also a dark room and workshop.

PATHOLOGY.—The pathological laboratory occupies the entire west third floor, two thousand four hundred square feet, and has in addition a special room for research work, a museum and a professor's room. The teaching laboratory room, two thousand three hundred square feet, is on the east fourth floor, and affords each student separate locker and ample table space. Apparatus, instruments and teaching materials are provided without extra charge.

A NEW CLINICAL LABORATORY.—During the past summer a new clinical laboratory has been completed at Lakeside Hospital, of sufficient size to accommodate an entire class.

This provides the students with greatly increased facilities for the examination of secretions and excretions, sputum, purulent and other infections, blood, urine, stomach contents, stools, etc., and permits them to make personal examinations of tumors and other pathological specimens. This work is a part of the regular instruction in the third and fourth years and greatly increases the efficiency with which the clinical work of these years is performed. Microscopes and other instruments are available for the work in this department.

MUSEUMS.

Rooms in the College building are set apart for the preservation of anatomical and pathological preparations, casts and specimens. Persons not connected with the College who have specimens they wish preserved can place them in these rooms, with the owners' name attached and such histories, descriptions or remarks as they choose to give, respecting them. A very complete museum of Materia Medica is kept accessible to the students.

HOSPITALS.

LAKESIDE HOSPITAL.—The new Lakeside Hospital occupies a plot of ground four hundred feet long by three hundred and eighty feet deep, on the bank overlooking Lake Erie, about five minutes' walk from the College building. It affords accommodation for two hundred and fifty patients. The staff is composed of members of the Faculty of this College. The hospital has an amphitheatre seating about two hundred students for the surgical classes, and a smaller one with a seating capacity of over one hundred for the medical classes. On the third floor of the dispensary building are two lecture rooms, each capable of seating fifty to seventy-five students. There are eighteen resident assistants for the departments of surgery, gynecology, medicine, ophthalmology, children's diseases, pathology, etc. These positions are open to the graduates of this College, and afford great opportunities for practical work.

There is in process of erection and now nearly completed a pavilion for infectious and contagious diseases, having four small wards, with every facility for the proper care and study of these diseases.

ST. VINCENT'S (CHARITY) HOSPITAL.—This is one of the oldest and best known institutions in the city and state.

It has between seventy-five and one hundred beds. The staff is selected by the faculty, and the clinical material of the hospital is utilized for instruction in this College. There are six hospital positions open each year to the graduates of this College only.

This hospital is just adding a complete new wing for the accommodation of female patients. This will add about sixty beds, besides operating pavilion and recovery rooms, to the capacity of this institution. A complete dispensary department is added in the basement of this wing, with all facilities for the care of out-door patients.

City Hospital.—This institution is under municipal control. It accommodates one hundred and fifty to one hundred and seventy-five patients continually in the adult department and has a new building for children, with one hundred beds, besides operating rooms, pathological laboratory, etc. From September to January regular clinics in medicine, gynecology, surgery, neurology and cutaneous and venereal diseases are given here by members of this faculty. The insane department of this hospital affords material for clinical instruction in mental diseases. Frequent autopsies are held and abundant material for pathological demonstrations obtained. The resident staff is selected by competitive examination, and the students of this College are eligible.

St. Ann's Maternity Hospital and Foundling Asylum.—During 1901 a long desired change was made at the St. Ann's Maternity Hospital and Foundling Asylum. The old institution located on Marion Street was vacated to supply more space to St. Vincent's Hospital. The Severance homestead at the corner of Woodland and Longwood was purchased and remodeled and formally opened to carry on the work in a new location during the latter part of December. It is to be hoped that the present year will witness the erection of a new building to supply the urgent demand for more room.

St. Ann's Maternity Hospital affords abundant opportunity for the study of the physiology, mechanism and management of labor at the bedside. Graduates of our college are appointed as residents.

CLINICAL FACILITIES.

The clinical facilities of this College comprise, throughout the course, the two hundred and fifty beds at Lakeside

Hospital, one hundred and fifty beds of Charity Hospital, the Dispensaries at Lakeside and Charity Hospitals, one hundred beds of St. Alexis Hospital, the Maternity and Children's Home, and two hundred and seventy-five beds of the City Hospital during four months of each year.

RESIDENT PHYSICIANS.

From twenty-five to thirty resident positions are open to the graduates of the College in the hospitals of the city. Of the class graduating in 1901, twenty men received hospital appointments.

HOSPITAL SERVICE.

LAKESIDE HOSPITAL STAFF.

Medicine—DRS. H. H. POWELL, J. H. LOWMAN, H. S UPSON, E. F. CUSHING.

Surgery—DR. D. P. ALLEN; DR. G. W. CRILE, Associate.

Ophthalmology—DR. B. L. MILLIKIN.

Gynecology—DR. H. ROBB.

Dermatology—DR. W. T. CORLETT.

Pathology—DR. W. T. HOWARD, JR.

CHARITY HOSPITAL STAFF.

Consulting Physicians—DRS. G. C. ASHMUN, B. W. HOLLIDAY, J. H. LOWMAN.

Consulting Surgeons—DRS. G. C. E. WEBER and D. P. ALLEN.

Consulting Ophthalmologist—DR B. L. MILLIKIN.

Consulting Dermatologist—DR. W. T. CORLETT.

Consulting Gynecologist—DR. H. ROBB.

Visiting Physicians—DRS. H. J. LEE, J. E. COOK, J. P. SAWYER, T. A. BURKE.

Visiting Surgeons—DRS. F. E. BUNTS and C. A. HAMANN.

Visiting Gynecologist—DR. W. H. HUMISTON.

Visiting Ophthalmologist—DR. W. E. BRUNER.

Pathologist—DR. W. T. HOWARD. JR.

HOME OF MATERNITY.

Obstetrics—DR. H. H. POWELL.

CONSULTING STAFF AT CITY HOSPITAL.

Medicine—DRS. J H. LOWMAN and J. E. DARBY.

Surgery—DRS. D. P. ALLEN and F. E. BUNTS.

Obstetrics—DR. H. H. POWELL.

Neurology—DR. H. L. SPENCE.

Gynecology—DR. W. H. HUMISTON.

Dermatology—Dr. W. T. Corlett.
Pathology—Dr. W. T. Howard, Jr.
Ophthalmology—Dr. W. E. Bruner.
Laryngology—Dr. J. M. Ingersoll.

VISITING STAFF.

Drs. C. F. Hoover and C. A. Hamann.

DISPENSARIES.

Free Dispensaries are maintained at Lakeside and Charity Hospitals with daily service except Sundays. These college dispensaries were established on the Hurlbut and Huntington Funds and afford treatment to about ten thousand new cases annually.

LAKESIDE HOSPITAL SERVICE.

Medicine—Dr. J. H. Lowman, Director; Drs. E. H. Season, G. W. Moorehouse, Physicians in Charge.

Surgery—Dr. D. P. Allen, Director; Drs. H. A. Becker, Chas. E. Briggs, and R. H. Birge, Surgeons in Charge.

Obstetrics—Dr. H. H. Powell, Director; Dr. F. S. Clark, Obstetrician in Charge.

Diseases of Children—Dr. E. F. Cushing, Director; Drs. F. S. Clark, J. J. Thomas, Physicians in Charge.

Gynecology—Dr. H. Robb, Director; Dr. R. H. Sunkle, Gynecologist in Charge.

Nervous Diseases—Dr. H. S. Upson, Director; Dr. H. L. Spence, Neurologist in Charge; Dr. F. C. Hutchins, Assistant.

Ophthalmology—Dr. B. L. Millikin, Director; Dr. W. E. Bruner, Ophthalmologist in Charge; Drs. H. J. Herrick, Wm. E. Shakleton, Assistants.

Dermatology and Syphilis—Dr. W. T. Corlett, Director and Physician in Charge; Dr. E. P. Carter, Assistant.

Diseases of Nose, Ear and Throat—Drs. J. M. Ingersoll and William R. Lincoln, Surgeons in Charge; Drs. L. W. Childs, S. H. Large, Assistants.

CHARITY HOSPITAL SERVICE.

Medicine—Dr. J. P. Sawyer, Director; Drs. W. O. Osborne, W. H. Merriam, Frank J. Geib, Physicians in Charge.

Surgery—Dr. F. E. Bunts, Director; Drs. Fred C. Herrick and T. E. Griffiths, Surgeons in Charge.

Gynecology—Dr. W. H. Humiston, Director; O. T. Thomas, Gynecologist in Charge.

HOME OF MATERNITY.

Obstetrics—Dr. H. H. Powell, Director; Dr. J. J. Thomas, Obstetrician in Charge; Drs. Eugene O. Houck, Wm. J. Woolgar, Assistants.

DISPENSARY APPOINTMENTS.

Members of the third year class remaining in the city during the summer, may be appointed for practical work in the Dispensary, in sections, by applying to the Dean.

EXPENSES.

The fees are $125 a year. This amount includes payment for tuition and all laboratory expenses, except the price of anatomical material, breakage and use of oil immersion microscopes, and is due before October twentieth of each year. Students who prefer may pay $75 by October twentieth, and $55 by March fifteenth of the college year. No student shall be permitted to present himself for examination in any branch who has not paid all dues and liabilities. Students who wish to pay for the entire four years' course by October twentieth of their first year, will be allowed a reduction of $50 on the whole amount. A deposit of $2 is required from students in each of the laboratories at the outset, in addition to the tuition fee, to cover breakage. The unused balance of such deposit is returned at the end of the session. A rental of $5.00 per year will be charged for the use of oil immersion microscopes, the students having full use of these instruments during their entire year. Students who prefer may furnish their own microscopes.

Good board can be procured at from three to five dollars a week, and furnished rooms at from five to ten dollars a month. By forming "clubs" students are able to bring their living expenses considerably below these prices. The janitor at the College building keeps a list of boarding houses for the convenience of students. By an arrangement with Goodrich House, which stands within one block of the College, a gymnasium, with bathing accommodations, is available to the students at a very small cost. At the Y. M. C. A. building, which is near, similar opportunities are afforded.

POST-GRADUATE AND SPECIAL INSTRUCTION.

Courses of post-graduate and special instruction for physicians and special students will be given in the various

laboratories, commencing about June 1st and lasting for six weeks.

CHEMISTRY. JAMES A. EVANS, B. S. A course in Chemistry in its relations to practical medical work will be given in the laboratory during a period of six weeks. Fee, $25.00.

PHYSIOLOGY. MR. JOHN A. SIPHER, A. B. A course of practical physiology, based upon the practical exercises in Stewart's Manual of Physiology. Six half days a week for six weeks. Fee, $20.00. A fee of $5.00 to defray the cost of animals is divided by each set of four.

PHARMACOLOGY. DR. R. A. HATCHER. This course will be identical with that given in the pharmacological laboratory during the regular session. It comprises experiments on mammals and frogs, as well as chemical work. The fee for the mammal and frog work is $15.00, for the chemical work, $7.50; for both together, $20.00. Others than matriculated students of this school will be charged a laboratory fee of $3.00 for the mammal work, and $2.00 for the chemical work, in addition to the above.

PATHOLOGICAL ANATOMY. DR. HENRY T. PARKER. In this course both gross and histological pathological anatomy will be studied. General problems, such as degeneration and necrosis, inflammation, the infectious granulomota, and tumors will be considered first, after which the special pathological anatomy of the various organs will be studied. The laboratory is well supplied with material for the course, which will be entirely practical, the students doing their own staining and mounting. They will be given such further botanical training as they may desire. The class will meet six half days a week for six weeks. Fee, $30.00.

CLINICAL MICROSCOPY. DR. L. W. LADD. This course will include the various methods of examining blood, sputum, urine, faeces, gastric contents, pathological exudates, and in general, the application of the microscope to the diagnosis and the other aspects of clinical medicine. The class will meet three times a week for a period of two hours each meeting, for six weeks. Fee, $30.00.

For further information apply to the instructors in the various courses.

Graduates in medicine may also arrange for courses of clinical instruction in medicine, surgery and the various specialties during the same period by applying to the Dean of the College, or to the men in charge of the various departments.

APPENDIX.

CLASS EXAMINATIONS, 1901.

HISTOLOGY.

1. Stain, mount, identify, draw and describe fully the specimens A, B, C, D. [A was lymph gland; B, cerebellum; C, large intestine; D, ovary].

2. Identify the stained and mounted specimens 1 to 7. [These were: 1, bone; 2, cardiac end of stomach; 3, thyroid; 4, mucous salivary gland; 5, transverse section of nerve; 6, cerebrum; 7, cornea].

CHEMISTRY.

1. What is Chemistry? Name fifteen of the elements and give the atomic weight and quantivalence of each.

2. Give a general description of the manufacture of sulphuric acid; and how much acid can be obtained from one ton of gelma, which assays 98% Pf. S.

3. Give the general analytical separation of the metals and the members belonging to each group.

4. How would you proceed in a case of arsenical poisoning?

5. What are some of the more important acids of phosphorus, giving the formula and molecular weight of each?

6. What two classes of mercury salts are there and describe some of the most important salts of each?

7. A volume of oxygen measures 1200 C. C. at 4° C. and at a higher temperature the volume was observed to be 1460 C. C., what was its final temperature?

8. What are some of the most important salts of sodium; give formulas, molecular weights and methods of preparation of each?

9. What elements constitute the Halogen Group? Describe each of them.

10. What are acids, bases and salts, and how much oxygen, by volume, measured at 20° C. and 720 m. m. pressure, can be obtained from 30 grains of potassium chlorate?

The examination in the Laboratory consisted in the analysis of three solutions, containing not less than four unknowns each.

ORGANIC CHEMISTRY.

1. What is Organic Chemistry, and into what general groups are the organic compounds divided? Give illustrations of each.

2. A certain organic compound was analyzed and analysis gave results as follows: C=61.32%; H=5.09%; O=23.37%; N=10 22%.

The V. D.=68.5.

3. What grouping of elements represent the following list of compounds, and give illustrations of each: Hydrocarbons, ethers, esters, ketones, aldehydides, acids, bases; primary, secondary, and tertiary alcohols; phenoles, hydrazones, azo, diazo, and amides.

4. What is fermentation and how does it differ from putrefaction?

5. What are the Carbohydrates? Give the general classification and examples of each group.

6. What are fats, and describe the process of saponification and the products formed?

7. Give a list of the di-and triatomic phenoles.

8. What is benzoic aldehyde and how can it be converted into the corresponding acid and alcohol? Give the formula of each.
9. How can benzole be obtained from carbon? Show the various chemical processes.
10. What are some of the ptomaines belonging to the paraffine series, giving their formulas? What are some of the groups of color bases derived from the phenoles?

BACTERIOLOGY.

1. Into what groups were the micro-organisms studied in this course divided? Name a member of each group.
2. Classify bacteria morphologically. Where are they found in nature and what are their functions?
3. Name the bacteria that most commonly cause inflammation.
4. Describe the morphological and cultural characters of B. typhosus, and name the points in the affirmative diagnosis between it and B. coli-communis.
5. Describe morphological and cultural characters of (*a*) Pyocyaneus; (*b*) B. prodigiosis.
6. Describe the morphological and cultural characters of Sp. chaloral and state the difference between it and Sp. melschordovi.
7. Name all the bacteria you studied which (*a*) were morphological; (*b*) stained by Grams, and (*c*) liquified gellatine.
8. Describe ardium albicans.

ANATOMY.

Examinations in anatomy are oral.

PHARMACY.

1. Name the different vessels used for measuring fluids, and state the advantages of each.
2. Express in the metric system: 2 pints; 6 ℥ troy; 12 minims.
3. How can you hasten (*a*) solution? (*b*) evaporation?
4. Define: (*a*) Gum; (*b*) Gum-Resin; (*c*) Resin; (*d*) Alkaloid; (*e*) Glucoside; (*f*) Cellulose; (*g*) Fatty oil; (*h*) Essential oil; (*i*) Eleoptene; (*k*) Starch.
5. (*a*) What is an ointment? (*b*) What substances may be used as the base? (*c*) What are the advantages of each?
6. Define: (*a*) Pilula; (*b*) Pulvis; (*c*) mucilago; (*d*) Extractum fluidum; (*e*) Mistura.

MATERIA MEDICA.

1. Define Materia Medica; Pharmacy; Pharmacology; Therapeutics.
2. Define a medicine; a remedy; a poison.
3. By and through what avenues can medicines enter the body?
4. What conditions may modify the action of medicines?
5. Define an astringent; a cathartic; an emetic; a diaphoretic; an emenogogue; a diuretic; a tonic; a stimulant.
6. Opium: (*a*) describe; (*b*) its source; (*c*) its active principles; (*d*) preparations; (*e*) dose of each; (*f*) action; (*g*) use.
7. Describe tannic acid; boric acid; hydrochloric acid; hydrocyanic acid; properties and dose of each.
8. Aconite: (*a*) active principles; (*b*) preparations and dose of each; (*c*) action and use.
9. Same of Belladonna.
10. Same of Cinchona.

PHYSIOLOGY.

(WRITTEN EXAMINATION).

1. Enumerate the factors concerned in maintaining the blood-flow in the veins. What are the characteristics of the circulation in the arteries, capillaries and veins respectively? State clearly the reasons for these characteristics.

2. What gases can be extracted from blood? By what methods can they be extracted and in what amounts? How are the gases distributed in the blood? In what chemical or physical condition do they exist in it?

3. Give as full account as you can of intestinal digestion. Are bacteria essential for this part of digestion? Give reasons for your answer.

4. What is meant by the "circulation of the bile?" Where is iron found in the body? What is its source? and its fate? What evidence is there that bile-pigment is derived from blood-pigment?

5. State fully the effects of removal of (*a*) the pancreas; (*b*) the thyroid; (*c*) the spleen; (*d*) the salivary glands. What are the effects of intra-venous injection of extracts of the supra-renal gland?

6. Describe fully the histological and physiological effects of hemisection of the spinal cord in the mid-dorsal region.

7. What evidence is there that the Rolandic area has sensory functions?

8. What is (*a*) irregular; (*b*) regular astigmatism? To what are they due?

PHYSIOLOGY.

(PRACTICAL EXAMINATION).

Two of the following experiments were assigned to each student after entering the examination room. The candidate is supplied only with such apparatus or reagents as he may ask for.

1. Prepare and demonstrate haemoglobin crystals.
2. Prepare and demonstrate haemin crystals.
3. Estimate the quantity of urea in the specimens of urine A and B.
4. Prepare glycogen, and demonstrate same.
5. Determine what ferments, if any, are present in solutions A and B. [A was saliva; B, gastric juice].
6. Determine the amount of any pathological substance in the specimen of urine furnished. [Contained glucose 3%].
7. Take tracing to show effect of stimulation of frog's vagus on the heart.
8. Take tracing to show the composition of tetanus.
9. Insert a gastric canula, and obtain pure gastric juice, from the animal provided.
10. Demonstrate, by stimulation of a nerve, pupillary dilatation.
11. Demonstrate the effects of stimulation of the cortical motor areas in the mammal provided.
12. Take tracing to show increase of respiration upon stimulation of some nerve.

PATHOLOGICAL HISTOLOGY.

The examination in pathological histology consisted in the thorough description and interpretation of three unknown sections.

GROSS PATHOLOGICAL ANATOMY.

The examination in this branch is oral.

GENERAL PATHOLOGY.

An oral examination. The questions included the following subjects: The general principles of pathology, the etiology of infectious and non-infectious diseases, the portals of entrance of micro-organisms into the body, the bacterial flora of the body, the bacteria of wound infection, immunity, antitoxins, the etiology and pathological anatomy of typhoid fever, tuberculosis, diphtheria, syphilis, pneumonia, arterio-sclerosis, the pathology of the circulation, etc.

THERAPEUTICS.

1. How do antipyretics control temperature and illustrate each class.
2. Alcohol: (*a*) its changes, if any, in the body; (*b*) destiny; (*c*) its influence on digestion; (*d*) circulation; (*e*) blood; (*f*) tissue change; (*g*) indications for use.
3. Opium: (*a*) describe; (*b*) active principles; (*c*) preparations; (*d*) dose of each; (*e*) action; (*f*) synergists as anodynes (*g*) as antiphlogistic; (*h*) as hypnotic.
4. Symptoms and treatment of opium poisoning.
5. Digitalis: (*a*) how and why is it a heart tonic; (*b*) a diuretic; (*c*) indications for use and preparations to be used in each case and why?
6. Quinine: Illustrate its use; (*a*) as tonic; (*b*) as antiperiodic; (*c*) as antipyretic; (*d*) as oxytocic.
7. Anaesthesia: (*a*) local; (*b*) general; (*c*) means and methods of producing; (*d*) sources of danger.
8. Belladonna (*a*) active principles; (*b*) preparations and dose of each; (*c*) action; (*d*) indications for use; (*e*) symptoms and treatment of poisoning.
9. Ergot: (*a*) action; (*b*) indications and contraindications for use in obstetrics.
10. Outline the treatment of pneumonia.

PHARMACOLOGY.

(WRITTEN).

1. Write a prescription for a diuretic mixture containing: (*a*) a drug stimulating the renal cells; (*b*) one acting as a salt or alkali; (*c*) as an organic irritant; (*d*) as a cardiac tonic; (*e*) flavor, vehicle, etc. Write the names without abbreviations, and give the quantities in both metric and apothecaries' systems.
2. Describe the different ways in which antipyretics may act, and the ways of differentiating between these. Give examples.
3. Discuss the theoretical basis of the action of potassium iodide.
4. Name one or more drugs which may be employed to secure: (*a*) stimulation of the arterial muscle; (*b*) paralysis of arterial muscle; (*c*) paralysis of vagus ganglia; (*d*) stimulation of vagus center; (*e*) stimulation of cerebral cortex.
5. Name six of the most important emetics, stating dose for adults (metric system).
6. Discuss *fully* the pharmacology, symptoms, antidote, and therapeutics of *one* of the following drugs: Aconite, Acids, Mercury.

PHARMACOLOGY.

(PRACTICAL EXAMINATION).

Each student performed a chemical experiment, and one on a frog and a mammal.

CHEMISTRY: Determine by chemical tests whether solutions R, S, T, contain strychnine, codeine, or morphine; U, quinine, veratrine, or atropine; V, a formate, oxalate, or cyanide; W, an alkaloid.

Demonstrate the effect of the solutions X, Y, and Z on the ferment action of saliva.

FROG: Inject 1% of solution G into a frog; describe the symptoms and diagnose the poison. Determine by physiological tests whether solution I or K contain cocaine. Demonstrate the effects of solution L on maximal load lifted by frog's muscle. Demonstrate effects of solution M upon excitability of muscle and nerve; does it possess a curare action? Demonstrate and describe the effects of solutions N, O, P, or Q, applied to the frog's heart in situ; to what group does the poison belong?

MAMMALS: (*a*) Insertion of tracheal and carotid canulae. (*b*) Anaesthetic. Insertion of canulae into ureter. Intravenous injection of normal saline on flow of urine. (*c*) Preparation of manometer for tracing. Insertion of vein canulae. Effect solution A on flow of urine. (*d*) Apparatus for respiratory tracing—effect of solution A. (*e*) Blood pressure tracing with solution A. Insertion of femoral canulae. (*f*) Solution A on venous pressure. Apparatus for pressure injection. (*g*) Solution B on blood pressure tracing. Apparatus for cardiomyogram. (*h*) Respiratory tracing with solution B. Pressure tracing with solution C.

[A=Caffeine; B and G=Strychnine; C=Nitroglycerine; I=Cocaine; L=Caffeine 1-1000; M=Quinine 1-10000; N=Aconite 1-25; O=Digitalis 1-25; P=Veratrine 1-200; Q=$BaCl_2$ 1-100; R=Strychnine 1-500; S=Morphine 1-100; T=Codeine 1-100; U=Atropine 1-100; V=HCN 1-1000; W=Quinine 1-10000; X=Carbolic 5%; Y=Alcohol 10%; Z=$HgCl_2O$.2%].

DERMATOLOGY.

1. Give symptoms of, and treatment of impetigo.
2. Mention the main points of distinction between lupus vulgaris and a tubercular syphilide.
3. What is acne? Give chief distinguishing features and the treatment of acne simplex.
4. Herpes zoster, its symptoms, etiology, course and treatment.
5. Discuss the treatment of syphilis; (*a*) During the first year of the disease; (*b*) After the disease has existed many years and is accompanied by deep ulceration and loss of structure.

NOSE, THROAT, AND EAR.

1. Discuss the physiology of the nose.
2. Discuss epistaxis.
3. Discuss otitis media acuta.
1. Describe tuberculosis of larynx.
2. Describe symptoms and treatment of acute folecular tonsillitis.
3. Give treatment and symptoms of chronic pharyngitis.

PHYSICAL DIAGNOSIS.

Examination in physical diagnosis is oral and clinical.

GENITO-URINARY DISEASES.

1. Give the etiology of gonorrhea and the treatment you would employ during the acute stage.
2. What is paraphimosis, and when would you consider it necessary to relieve the condition? How would you proceed to do this?
3. Give the principal causes, and the treatment of epididymitis.
4. What treatment would you adopt in acute cystitis?
5. Give the etiology of organic urethral stricture.

SURGICAL PATHOLOGY.

1. Name (*a*) six bacteria common to surgery; (*b*) their origin and usual mode of infection and clinical manifestation.
2. Define (*a*) fever; (*b*) name and define the grades of surgical fever.
3. What is the difference between simple and infective inflammation? Outline process of repair.
4. Name chief points of differential diagnosis of tubercular lesions of skin and mucous membranes with reference to non-tubercular lesions.
5. What is (*a*) a benign tumor; (*b*) a malignant tumor; (*c*) define sarcoma, carcinoma. Give two clinical examples of each with diagnosis.

MEDICINE.

DR. LOWMAN.

1. Jaundice: (*a*) Definition; (*b*) Symptoms; (*c*) Distinction between obstructive and toxic jaundice; (*d*) What is grave jaundice? (*e*) Causes of obstructive jaundice? (*f*) Test for bile in the urine and blood.
2. Typhoid Fever: (*a*) What is the diagnostic value of the serum reaction? (*b*) What is the diagnostic value of the diazo reaction? (*c*) Describe the method of making the above tests; (*d*) What is the value in diagnosis of iliac tenderness, chills, hemorrhage, white blood count, temperature? (*e*) What is the peculiar behavior of the tongue, abdomen, bowels, liver, pulse, skin, spleen in typhoid fever? (*f*) State immediate causes of death in typhoid fever.
3. Pneumo-pyo-thorax: (*a*) Differential diagnosis; (*b*) Causes; (*c*) Treatment.
4. Mitral Stenosis: (*a*) What is the form of the heart as outlined by percussion in M.-S.? (*b*) What murmur is present and how is it caused? (*c*) What is the behavior of the heart as to rhythm and force? (*d*) What are some of the remote systemic effects?
5. Rheumatism: (*a*) Name different forms; (*b*) Describe the course of acute articular rheumatism; (*c*) What are the chief dangers and complications? (*d*) Treatment in full?

MEDICAL JURISPRUDENCE.

1. Given the hand of a dead body, how can we determine the height of the body to which it belongs?
2. What is the most important sign of death by suffocation?
3. By what signs can we determine the probable length of time which has elapsed since death occurred?
4. How can we distinguish between wounds inflicted anti- and postmortem?

5. What important point is of value in distinguishing between postmortem decomposition, and lesions produced by poisons?
6. What conditions retard putrefaction?
7. Describe in general the gross appearances of a body putrefying in air, soil, and water?
8. What are the signs of death by drowning?
9. What is the most reliable test for a suspected blood stain, and upon what does it depend?
10. Of what value is the detection of red blood corpuscles in a suspected stain?
11. How soon after death does cadaveric rigidity set in, and how long does it last?
12. Is it always possible to determine the exact moment of death in a medico-legal sense?

SURGERY.

DR. ALLEN.

1. Carcinoma Mammae: (*a*) Diagnosis; (*b*) Treatment; (*c*) Method of operation; (*d*) Prognosis.
2. Hernia: (*a*) Name varieties; (*b*) Diagnosis of inguinal hernia; (*c*) Treatment of inguinal hernia; (*d*) Describe two operations.
3. Fistula in ano: (*a*) Causes of same; (*b*) Treatment and care.
4. What may cause collections of fluid in pleural cavity? Name the same and by what methods these may be treated.
5. What may cause oedema of a single lower extremity?
6. Tuberculosis: (*a*) Name the various manifestations of tuberculosis which may require surgical treatment; (*b*) diagnosis of tuberculosis of the dorsal or lumbar vertebrae; (*c*) Symptoms and treatment of same.

DR. BUNTS.

1. (*a*) Name the principal pus producing micro-organisms; (*b*) What are the essentials for their growth? (*c*) Give examples of mixed infection.
2. Describe minute changes taking place in formation of an abscess
3. (*a*) What are the indications for treatment of inflammation? (*b*) What are the terminations of inflammation? (*c*) What are the causes of swelling?
4. (*a*) Define gangrene; (*b*) What determines whether the gangrene shall be dry or moist gangrene? (*c*) Cause, prognosis, treatment of senile gangrene; (*d*) What it cancrum oris?
5. (*a*) Define septic intoxication; (*b*) Septic infection; (*c*) Pyemia; (*d*) What are the causes of post-operative fevers?
6. Erysipelas: Diagnosis, cause, treatment, prognosis. Tetanus: Diagnosis, cause, treatment, prognosis.
7. Aneurysm: Define, active clot, passive clot, Hunterian method and advantage.
8. Lymphangitis: Etiology, treatment. Phlebitis: Diagnosis and treatment.
9. Fractures: Symptoms, indications for treatment. Causes and treatment of delayed union of femur.
10. Describe one of the following operations: 1. Thoracoplasty. 2. Amputation of hip joint. 3. Removal of infraorbital nerve. 4. Intestinal anastomosis.

DR. CRILE.

1. Give non-operative treatment of appendicitis.
2. Define shock and give treatment.
3. Define collapse and give causes.
4. Cause, diagnosis and treatment of tubercular glands of neck.
5. Treatment of hernia in children.

OPHTHALMOLOGY.

1. Name the structures of the eye-ball from behind forward, in their order. Which are the most important?
2. Give the varieties of conjunctivitis. State the causes, pathology, course and treatment of acute, purulent ophthalmia.
3. Give the symptoms of paralysis of the third nerve.
4. Give the differential diagnosis of sympathetic irritation and inflammation. State the causes and treatment for sympathetic inflammation.
5. Give the differential diagnosis between acute conjunctivitis, acute iritis, and acute glaucoma. Give the treatment for acute glaucoma.

DISEASES OF CHILDREN.

1. Symptoms and diagnosis of tubercular peritonitis.
2. Causes and symptoms of post-laryngeal adenitis and abscess.
3. Diet-list for a child at 10 months; at 2½ years.
4. Conditions in which broncho-pneumonia is apt to arise; symptoms and diagnosis.
5. Treatment of scarlet fever with detail of isolation and disinfection.

GYNECOLOGY.

DR. ROBB.

1. What is the normal position of the uterus and to what extent may its position vary within physiological limits?
2. What are the different forms of endometritis? Discuss the causes, symptoms and treatment.
3. Define prolapsus of the uterus, and describe its symptoms and treatment.
4. What is meant by retroflexion and retroversion of the uterus? Give etiology, symptoms and treatment.
5. How and under what circumstances would you apply a pessary? Enumerate the different pessaries in common use.
6. Mention the varieties of vaginitis, and their treatment.
7. State the chief etiological factors which may be responsible in a case of pyosal pinx.
8. Describe in detail the nature and symptoms of extra-uterine pregnancy.
9. How would you treat a case of ruptured tubal pregnancy?
10. What are the symptoms and physical signs of malignant disease of the uterus and of the cervix? What treatment would you advise? How is the condition to be differentiated from myoma of the uterus?

The examinations are partly oral and partly written. The method is to divide the ground covered during the year into say one hundred questions and then to divide the class up into ten sections and to give two or three men the same set of questions and in this way very few men in the class get the same set of questions.

DR. HUMISTON.

1. What are the causes of dysmenorrhoea?
2. What are the indications for curettement?
3. What are the clinical evidences of carcinoma of cervix uteri and how would you differentiate between a simple erosion and beginning carcinoma of the cervix?
4. What is the normal position of the uterus, and by what means would you diagnose a retroflexion of the uterus?
5. Give the treatment for an acute gonorrhoeal vaginitis.
6. Give the clinical signs (objective and subjective) of ruptured tubal pregnancy.
7. How would you differentiate retroflexion of the uterus from a fibroid in the posterior wall of that organ?
8. What is a pyo-salpinx and what are its etiologic factors?
9. Name the cystic formations found in the ovary.
10. Give the differentiation between a uterine fibroid and an ovarian cyst.

OBSTETRICS.

1. Give the diameter of the foetal skull.
2. Give the foetal circulation.
3. Give the treatment of abortion. (*a*) When threatened; (*b*) When inevitable.
4. Describe the usual mechanism observed in the third position of the head.
5. Having determined a breech presentation, how would you manage the case?
6. Having determined a face presentation above the brim, give treatment in (*a*) mento-anterior position; (*b*) in mento-posterior position.
7. Give causes, prognosis and treatment of prolapse of the umbilical cord.
8. Give the cause and treatment of post-partum hemorrhage.
9. Give the symptoms of extra-uterine gestation.

NEUROLOGY.

1. What are the causes of brachial monoplegia?
2. Give the symptoms caused by a tumor on the left side of the pons Varolii.
3. Differentiate hysteric from epileptic convulsions.
4. What is the treatment of hemiplegia?
5. How are the reflexes used in diagnosis?

PREVENTIVE MEDICINE.

1. A knowledge of what facts, in respect to any communicable disease, is essential to efficient action for the prevention of such disease?
2. How long should isolation be maintained for cases of (*a*) small pox; (*b*) scarlet fever; (*c*) diphtheria?
3. How can infection through the skin and mucous surfaces best be prevented?
4. In what manner may inhalation of dust predispose to infection through the lungs?
5. Give three substances which may be effectively used as vapor, and three solutions which may be used as spray, for the disinfection of rooms and clothing.

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ALUMNI ASSOCIATION.

The annual meeting of the alumni of Cleveland Medical College and the Medical College of Western Reserve University will occur June 11, 1902. Lectures, clinics and laboratory demonstrations will be given during the day, and a business and social gathering will be held in the college building during the evening.

J. P. SAWYER, M. D., Cleveland, President.
L. S. SWITZER, M. D., Akron, O., Vice-Pres
J. S. WOOD, M. D., Collinwood, O., Vice-Pres.
G. C. ASHMUN, M. D., Cleveland, Rec. Sec'y.
W. M. OSBORN, M. D., Cleveland, Cor. Sec'y.
E. B. RHODES, East Cleveland, Treas.